

,			
•			

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of	)	
	)	
Unbundled Access to Network Elements	)	WC Docket No. 04-313
Review of the Section 251 Unbundling	)	CC Docket No. 01-338
	,	CC Docket No. 01-338
Obligations of Incumbent Local Exchange	)	
Carriers	)	

# DECLARATION OF THOMAS MAGUIRE

- 1. My name is Thomas Maguire. My business address is 1095 Avenue of the Americas, New York, New York. I am a Senior Vice President in Verizon's Wholesale Markets Group with primary responsibility for wholesale ordering, provisioning and maintenance. In this capacity, I am responsible for Verizon's hot cut processes.
- 2. Since joining Verizon over 23 years ago as a service technician, I have held managerial positions in installation, maintenance and performance management. My experience includes coordination of "hot cuts" and the ordering, provisioning and maintenance of all unbundled network elements. My education background includes a Bachelor of Science degree from Adelphi University, and an M.B.A. from Long Island University.

# I. Purpose of Declaration

3. The purpose of my declaration is to explain Verizon's hot cut processes, including Verizon's new batch hot cut process, and to demonstrate that these processes

can accommodate significant increases in hot cut demand following the elimination of unbundled local switching. Verizon's hot cut processes have already been reviewed and approved by the New York Public Service Commission ("New York PSC"). The New York PSC concluded that "it is possible for Verizon to hire and train additional workers to perform a significantly expanded volume of hot cuts that will necessarily be required if the availability of UNE-P is phased out in the future" even if "Verizon will be required to perform perhaps a hundred times as many hot cuts as it currently performs."

- 4. Verizon's hot cut processes have been ISO-certified nationwide and the Commission has found that these processes enable competing carriers to compete in commercial volumes in every state where Verizon has been authorized to provide long distance service. In addition, Verizon's hot cut performance has consistently met or exceeded applicable performance standards and benchmarks, even during significant increases in demand.
- 5. Verizon's hot cut processes can be scaled to handle significant increases in demand simply by adding personnel. Based upon the volumes of hot cuts estimated by Dr. William E. Taylor for nine states served by Verizon, I present estimates of the additional personnel that Verizon would need to handle those volumes during a 12-month transition period for the elimination of unbundled switching and UNE-P. Dr. Taylor then applies those results for Verizon's remaining states. I also explain that Verizon can hire

<sup>&</sup>lt;sup>1</sup> Proceeding on Motion of the Commission to Examine the Process and Related Costs of Performing Loop Migrations on a More Streamlined (e.g., Bulk) Basis, Order Setting Permanent Hot Cut Rates, Case 02-C-1425, at 5-6 (New York PSC, Aug. 25, 2004) ("NY Order").

and train the additional employees that would be needed to meet those increases in hot cut volumes.

### II. Hot Cuts in General

- 6. A "hot cut" is the near-simultaneous disconnection of a Verizon working loop from a port on one carrier's switch, and the reconnection of that loop to a port on a different carrier's switch, without any significant out-of-service period. Initially, the loop may be either a Verizon retail loop, a loop being used to provide resold service, an unbundled loop that is part of a UNE-P arrangement, or a stand-alone unbundled loop connected to a competing carrier's switch. After the hot cut, the loop would generally be a stand-alone unbundled loop connected through to a competing carrier's switch. A simplified diagram of the basic physical connections and disconnections involved in a typical hot cut is provided in Exhibit 1.
- 7. There are three principal elements to a hot cut that prevent any significant out-of-service period for the customer being cutover. These three elements have traditionally required careful coordination between Verizon and the competing carrier.
- 8. First, Verizon must pre-wire most of the necessary connections to the point specified by the competing carrier at its collocation arrangement. This pre-wiring reduces the time required for the actual cutover and thus minimizes the amount of time when the customer cannot use his or her telephone. The connections that are pre-wired prior to the "due date" of the hot cut are identified in Exhibit 1.
- 9. Second, the competing carrier's switch port must provide dial tone prior to the time of the hot cut. If dial tone is not present, Verizon will not be able to confirm that

they are moving the correct loop. In addition, if the competing carrier's dial tone is not present at the time of the cut, the customer will not be able to make outgoing calls or receive incoming calls. For this reason, Verizon will not complete the hot cut if the competing carrier's dial tone is not present.

- 10. Third, the customer's telephone number must be ported immediately after the loop is cutover to the competing carrier's switch. If the customer's number is not ported at that time, the customer will not be able to receive incoming calls. Although there are various steps involved in number porting, the key step is notification of the Number Portability Administration Center ("NPAC") that the physical cutover of the customer to the new provider's switch has been completed and that the customer's number can therefore be ported. This critical step in the process has been traditionally handled by the competing carrier. It is important to note that this final notification cannot be made before the cutover because that would prevent the customer from receiving incoming calls before the cutover but it must be made as soon as possible after the cutover.
- 11. Verizon utilizes the most efficient technology currently available for performing hot cuts. However, a hot cut requires the physical disconnection and connection of wires, and that wiring work is inherently a manual process, a fact substantiated by the NY Public Service Commission. Contrary to the assertions that competing carriers have made previously, Verizon is aware of no viable, technically feasible, practical option for automating this wiring function. The FCC reached the same

conclusion in the *Triennial Review* proceeding<sup>2</sup> and there have been no new developments since then that would warrant a change in that determination. *See Triennial Review Order* ¶ 465 n.1409 (referring to a hot cut as a "largely manual process requiring incumbent LEC technicians to manually disconnect the customer's loop, which was hardwired to the incumbent LEC switch, and physically re-wire it to the competitive LEC switch").

## III. Verizon's Hot Cut Processes

12. Verizon currently has three separate, though closely related, hot cut processes: a basic hot cut process, a large job, or project, hot cut process and a batch hot cut process. These three processes are described in greater detail below.

# A. The Basic Hot Cut Process

- 13. Verizon's "basic" hot cut process is relatively straightforward. See
  Exhibit 2. The competing carrier submits a Local Service Request ("LSR") to Verizon,
  indicating that it wishes to use the existing loop to serve the customer. A properly
  completed LSR will generate the necessary related Verizon service orders, including:
  - A disconnect order to discontinue the existing retail service where the customer was originally a Verizon retail customer.
  - A change order, which establishes the unbundled loop for the competing carrier.

<sup>&</sup>lt;sup>2</sup> Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, 18 FCC Rcd 16978 (2003) ("Triennial Review Order"), vacated in part and remanded, USTA v. FCC, 359 F.3d 554 (D.C. Cir. 2004), petitions for cert. pending, NARUC et al. v. USTA, Nos. 04-12, 04-15, & 04-18 (U.S. filed June 30, 2004).

- A number porting order, which sends a message to NPAC before the due date indicating that the end user's telephone number will be ported to the competing carrier.
- A record order detailing listing information, including E911 data.
- 14. The LSR will either flow through Verizon's ordering systems, be manually processed through Verizon's ordering system, or be rejected back to the competing carrier for additional work.
- jumper or cross-connect wire from the appearance of the competing carrier's collocation facility assignment on Verizon's intermediate frame to the appearance of the end user's loop on the main distribution frame. At this time, the technician will determine that the competing carrier's dial tone is working and that there are no apparent problems with the loop. If there are any problems, Verizon will either address the issue, if it is within Verizon's control, or advise the competing carrier if the issue is not within Verizon's control.
- 16. On the due date, the competing carrier will advise Verizon that it is willing and able to process the hot cut. Upon receipt of this "go-ahead" confirmation, the frame technician will check once again for the presence of the competing carrier's dial tone. If the end user is using the line, the technician will wait for the line to go idle. Once the line is properly checked, the technician will lift off the jumper going to the Verizon switch and cut down the wire connected to the competing carrier's switch, thus completing the process of connecting the loop through to the competing carrier's switch.

- 17. Once this cutover is complete, Verizon advises the competing carrier. If the competing carrier accepts the hot cut, the competing carrier activates the porting of the end user's telephone number. If the competing carrier cannot accept the customer once the wiring work is complete, the competing carrier will ask Verizon to put everything back the way it was prior to the hot cut. At the same time, Verizon will push its disconnect order into the future to ensure that the customer does not get erroneously disconnected from the Verizon switch.
- Throughout the basic hot cut process, Verizon communicates with the competing carrier through Verizon's unique Wholesale Provisioning and Tracking System ("WPTS"). WPTS automatically retrieves information on hot cut orders from Verizon's Operations Support Systems ("OSS"), and serves as a "clearinghouse" for a wide range of data on the progress of those orders. At appropriate points, it automatically forwards work for review and verification to the competing carrier and to appropriate Verizon personnel. It provides a secure web site on which a competing carrier (and authorized Verizon personnel) can view (and download) status information. It also provides a platform for the delivery of messages between Verizon and the competing carrier about the competing carrier's dial tone, the competing carrier's willingness to proceed with the hot cut (the "go-ahead"), and the completion of wiring work. WPTS virtually eliminates the need for telephone calls between Verizon personnel and the competing carrier during the hot cut process.
- 19. Although Verizon's basic hot cut process is also sometimes described as the "individual" hot cut process, that is something of a misnomer. Verizon's basic hot

cut process is not limited to orders for one loop or even a small numbers of loops.

Rather, Verizon's basic hot cut process can be used for hot cut orders with a large or a small number of loops.

- 20. Verizon's basic hot cut process is the same process used throughout Verizon and has been reviewed by the Commission in numerous Verizon Section 271 cases. The Commission has consistently found that Verizon "provisions hot cuts in sufficient quantities, at an acceptable level of quality, and with a minimum of service disruption, thereby offering competitors a meaningful opportunity to compete in the local exchange market." Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York, Memorandum Opinion and Order, 15 FCC Rcd 3953 ¶ 291 (1999). See also Application of Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), and Verizon Global Networks Inc., For Authorization to Provide In-Region, InterLATA Services in Massachusetts, Memorandum Opinion and Order, 16 FCC Rcd 8988 ¶ 160 (2001) ("the hot cut performance Verizon makes available to competing carriers in Massachusetts minimizes service disruptions and affords a competitor a meaningful opportunity to compete").
- 21. In December 2000, Verizon's basic hot cut process received ISO 9000 certification from the International Organization of Standardization ("ISO"), a network of national standards institutes from 147 countries working in partnership with international organizations, governments, and industry, business, and consumer representatives. This

independent certification demonstrates that Verizon has a high quality and well developed structure in place for hot cuts. This structure must be overseen by an executive management team, which ensures that Verizon's policies are enforced. In addition, to retain certification, Verizon must participate in surveillance audits conducted by an external auditor every six months to demonstrate that Verizon is maintaining its quality processes. Verizon's basic hot cut process was most recently recertified by ISO in May 2004.

- B. The Large Job, or Project, Hot Cut Process
- 22. In the ordinary course of business, Verizon uses the basic hot cut process for orders of varying sizes. However, Verizon employs a separate process in cases in which competing carriers are willing to aggregate their orders by central office and due date. Verizon refers to this as the large job, or project, hot cut process.
- The competing carrier initiates the large job process by requesting project treatment for a group of orders. Verizon personnel then negotiate a due date and a fall-out date with the competing carrier. (The "fall out" date is a separate fallback due date for orders with unresolved dial tone problems that were identified on their primary due date.) In order to allow for quick identification of the individual orders in the job, the competing carrier submits LSRs whose Purchase Order Numbers ("PONs") all have a unique project identifier. All orders in the job that are in a particular central office and have a particular due date will be assigned to a single Verizon coordinator. A flow chart describing the steps in the large job hot cut process is provided in Exhibit 3.

- 24. In most respects, including particularly the wiring work required, the basic and large job processes are identical. The principal differences between the large job and the basic hot cut process are as follows: (a) the due date is negotiated for the large job process, rather than being the five-business-day standard interval; (b) a unique PON prefix is assigned to all orders included in the large job; (c) a "project spreadsheet" is used as a project management tool in the large job process; (d) the competing carrier is notified by telephone and through WPTS of the completion of each group of approximately 20 lines in a single large job project is cut over; and (e) the loops are typically hot cut out of normal business hours in the large job process.
- 25. Verizon's large job hot cut process was ISO certified in November 2002, and was most recently recertified in May 2004.
- 26. Verizon limits the number or location of the cuts that can be included in a single large job. According to the general guidelines that arose out of collaborative discussions between competing carriers and Verizon during the development of the large job process under the auspices of the New York PSC, a project will be worked in one central office per Manager's Area (up to two central offices per geographic area) on a particular negotiated due date. (A Manager's Area is defined as the region that includes the central offices supervised by a particular Verizon manager.) This limit on large job hot cuts is an overall limit, not a per carrier limit. There is also a guideline of 150 cutover lines per central office per due date. These guidelines allow Verizon's managers to balance their work force with minimal need for additional overtime.

- 27. If a competing carrier requires significantly more than 150 lines, the large job process can be utilized on a series of separate negotiated due dates to meet their requirements. When competing carriers have asked Verizon to relax these guidelines, Verizon has made every attempt to do so. Indeed, Verizon has performed large job hot cuts that went beyond the limits described above on a number of occasions.
- 28. For both Verizon and the competing carrier, the large job process enables many lines to be cut over in a way that makes more efficient use of the parties' work forces. Because of the need for coordination, hot cuts require attention from both Verizon and competing carrier personnel on the due date, and on various occasions before the due date. If a large number of orders submitted by a single competing carrier can be processed together, on a systematic basis, then both Verizon and competing carrier personnel will face a relatively constant amount of work over a predictable period of time. This allows for more efficient work force management than would be possible if the same number of cuts were completed on a sporadic and independent basis. This, rather than any reduction in the amount of work required per hot cut, is the principal benefit of the large job hot cut process.

## C. Verizon's Batch Hot Cut Process

29. Verizon developed the batch hot cut process in response to the Commission's *Triennial Review Order*. Verizon is willing to make its batch hot cut process available to any competing carrier that wishes to use it in any or all of the states where Verizon provides service. It is based on the large job hot cut process, but it does not require competing carriers to aggregate orders on a central office by central office

basis and it is not limited to a single competing carrier. Under the batch hot cut process, Verizon accumulates orders for multiple competing carriers on a central office by central office basis before scheduling the batch cut over in a particular central office. In addition, under the batch hot cut process, Verizon manages the entire process from order acceptance to porting the end user's telephone number and thus virtually eliminates the need for coordination between Verizon and the competing carrier. See Exhibit 4. Verizon has a patent application pending for its batch hot cut process. (Because of the additional work involved outside Verizon's central office, Integrated Digital Loop Carrier ("IDLC") loops are not eligible for the batch or large job hot cut processes.)

armarking specific hot cut orders for batch processing when they submit the LSR. In each central office, Verizon will accumulate orders submitted for batch processing until a "critical mass" of such orders is reached. The size of the critical mass will vary from central office to central office. The manager of each individual central office, based on the volume of cuts and the optimum level of frame staffing, will determine the number of lines that will constitute a critical mass in that central office. For example, a "critical mass" might be achieved relatively rapidly in an extremely busy office, while a remote, less active office might accumulate orders until a technician makes a scheduled visit to the office. Initially, the minimum accumulation period for batch hot cuts will be six business days and the maximum period will be 26 business days. Verizon is working to implement a capability in its WPTS that will enable the competing carrier to determine the cutover date at the time it submits its LSR for a batch hot cut.

- Occur through WPTS. The LSR submitted by the competing carrier for batch hot cuts will specify a due date 26 business days in the future, corresponding to the maximum accumulation period for the batch process. The competing carrier will receive notification of the actual cutover date on or before "DD-minus-6" (i.e., six days prior to the actual due date), and will be required by DD-minus-3 to give Verizon a sign-off (i.e., a "go/no-go" indication) for the batch hot cut through WPTS. The sign-off will verify that there is dial tone on the competing carrier facility that will be used to serve the customer.
- 32. For competing carriers that are already using UNE-P or resale, the 6-to-26-business-day accumulation period for batch hot cut orders should not be a concern because they are already serving the customer. In any event, Verizon does not expect that the interval for the batch hot cut process will be a problem for competing carriers because they currently do not tell their customers when a hot cut will take place.<sup>3</sup>
- 33. The batch hot cut process will differ from the current large job hot cut process with respect to the porting of the end user's telephone number. As a condition of utilizing the batch hot cut process, competing carriers will be required to authorize Verizon to submit the final number-port activation order to NPAC. This will eliminate the need for coordination with the competing carrier at the time of the cutover. In order to facilitate this process, the competing carrier will be required to include in its DD-

<sup>&</sup>lt;sup>3</sup> See Initial Post-Hearing Brief of AT&T Communications of NJ, L.P., Implementation of the Federal Communications Commission's Triennial Review Order, Docket No. TO03090705 at 47 (N.J. Board Pub. Util. July 2, 2004).

minus-3 sign-off a verification that it has created a port order in the NPAC database for Verizon to activate on the due date. The NPAC has indicated that it would be willing to accept the port notification from Verizon provided that appropriate authorization is provided by the competing carrier.

34. Another difference between the large job hot cut process and the batch hot cut process is the order of lines cut. Because of the reduced coordination requirements, the competing carrier will not need to know the precise order in which the lines will be cut under the batch process. Thus, the cutover schedule will not need to be rigidly tied to the order in which LSRs and lines are listed in a spreadsheet or WPTS report. This will give the frame work force increased flexibility to organize the orders in a way that will reduce somewhat the time spent moving between one cut and the next. Verizon will notify the competing carrier through WPTS only that each batch hot cut order and the number port are complete.

## IV. Verizon's Hot Cut Performance

Verizon has completed virtually all hot cuts on time and without installation troubles for many years, even when volumes were increasing at a rapid pace. See Exhibit 5. For example, in New York in October 2003, Verizon's volume of hot cut orders nearly tripled over the prior month's volume. At that same time, Verizon's on time performance improved to over 99.51 percent with fewer than one percent reported installation troubles. See Exhibit 5. Similarly, in Massachusetts in April 2003, Verizon's volume of hot cut orders nearly tripled over the prior month's volume. At that same time, Verizon's on

time performance improved to over 99.59 percent with fewer than three-quarters of one percent reported installation troubles. *See* Exhibit 5. Verizon has not incurred any performance penalties for hot cuts.

36. Verizon expects to maintain its high level of performance as the demand for hot cuts increases in response to the elimination of unbundled switching and UNE-P. Verizon is already working with competing carriers and state commissions to modify existing hot cut performance measures to incorporate hot cuts completed through Verizon's large job and batch processes. These modified performance measures will provide competing carriers with additional assurances that they will be able to serve their customers with their own switch.

# V. Scalability of Verizon's Hot Cut Processes

- 37. Verizon's hot cut processes are scalable and can handle whatever increase in hot cut volumes and related work might result from the elimination of local switching as an unbundled network element (and the consequent elimination of UNE-P). The New York PSC concluded that "it is possible for Verizon to hire and train additional workers to perform a significantly expanded volume of hot cuts that will necessarily be required if the availability of UNE-P is phased out in the future" even if "Verizon will be required to perform perhaps a hundred times as many hot cuts as it currently performs." NY Order at 5-6.
- 38. Verizon is presenting a scalability analysis here to show that Verizon can handle significant increases in hot cut volumes that may result from the elimination of unbundled switching and UNE-P. This scalability analysis is based on Dr. Taylor's

estimates of the number of incremental hot cuts that would be performed during a 12-month transition period following a project coordination phase. Dr. Taylor's estimates are based on three conservative scenarios that likely overstate the number of incremental hot cuts Verizon will experience. As Dr. Taylor explains, increasing intermodal competition from cable, Voice over Internet Providers ("VoIP") and wireless providers, commercial agreements to maintain UNE-P arrangements and recent announcements by CLECs such as AT&T, Z-Tel, MCI and Sprint who no longer view UNE-Ps as a viable business strategy and who are pursuing other strategies, such as VoIP, make it unlikely that competing carriers will convert many of their existing UNE-P customers to their own circuit switches through hot cuts. See Attachment L.

- 39. For purposes of this analysis, Verizon assumed that the basic hot cut process would be utilized. Even though large job and batch processing would undoubtedly account for a significant percentage of hot cut orders if unbundled local switching were eliminated, particularly in the conversion of the embedded base, this scalability analysis is limited to the basic hot cut process. Since the large job and batch processes enable Verizon to make more efficient use of its work force than the basic process, the analysis presented here is conservative.
- 40. If the demand for hot cuts were to increase significantly, none of Verizon's hot cut processes would need to be modified to handle the additional hot cuts. Each of Verizon's hot cut processes is flexible enough to accommodate a large range of demand for hot cuts.

- 41. In order to handle significant increases in demand under its hot cut processes, Verizon would need to deploy additional personnel to meet that demand. As with all non-recurring functions, the basic input is work time, and the basic constraint on the volume of work that can be handled is the size of the relevant work force. Verizon's basic approach to meeting increased demand would be to increase the size of the work forces at its central offices and work centers.
- 42. The first step in the analysis is the determination of the number of incremental hot cuts under three conservative scenarios that overstate the number of hot cut orders Verizon will likely receive. This analysis is described in greater detail in the declaration of Dr. William E. Taylor.
- 43. The second step in the analysis is the determination of the number of additional workers that would have to be added in various work centers to meet the incremental demand for hot cuts and related activity resulting from the elimination of UNE-P. This analysis is performed by a spreadsheet model which is described in greater detail below and by Dr. Taylor's analysis.
- 44. The third step in the analysis shows that Verizon can hire and train the additional employees needed to handle increased volumes of hot cut orders. Verizon also has the work space, equipment and tools that new employees would need to handle increased volumes of hot cut orders.
- 45. There are also two processes that are closely related to hot cuts and have therefore been included in Verizon's scalability analysis. The first process occurs where a customer served over an unbundled loop and a competing carrier's switch transfers to

Verizon retail service ("winback"). This cutover is not considered a "hot cut" because little or no coordination is required between Verizon and the competing carrier. As discussed above, a hot cut requires coordination in order to ensure that dial tone is available from the customer's new carrier at the time of the cutover and that the customer's number is ported immediately after cut over. In a winback, however, Verizon itself provides the new dial tone and ports the customer's number. It is also Verizon, of course, that performs the physical wiring work that completes the cutover, and that work is comparable to the work done for a hot cut. Although winbacks are not the same as hot cuts, winbacks are appropriately taken into account in Verizon's scalability analysis because they would use some of the same Verizon resources as standard hot cuts.

- 46. The second related process is the cutover of a loop where a customer is served by an IDLC loop. An IDLC loop is partly copper and partly fiber. The copper part of an IDLC loop connects a customer premises to a Remote Terminal ("RT") where it is multiplexed with other loops, in groups of 24, onto a DS1 fiber circuit. The DS1 fiber circuit is connected directly to the digital line ports on Verizon's switch. Since an IDLC loop is delivered to Verizon's switch as a multiplexed, DS1-level signal, there is no direct appearance of that voice-grade loop in Verizon's central office.
- 47. Although IDLC is a well-accepted and efficient means to deliver voice-grade telecommunications service over a fiber circuit to a digital switch, there is no technically feasible, practicable means of obtaining access to individual voice-grade loops at the central office when such loops are provisioned over an IDLC system.

  Accordingly, before a customer served by an IDLC-equipped loop can be cut over to a

competing carrier, the customer must be shifted from an IDLC-equipped loop to an all-copper loop or to a loop served via Universal Digital Loop Carrier ("UDLC") technology (which, unlike IDLC, can be unbundled in the central office). These additional steps are required for the cutover of an IDLC loop, but are not required for a traditional hot cut. Nonetheless, IDLC loop cutovers are appropriately taken into account in Verizon's scalability analysis, because they would use some of the same Verizon resources as standard hot cuts. There are other loop technologies that present unbundling issues comparable to IDLC loops, and these other loop technologies are likewise considered in Verizon's scalability analysis.

- A. Work Force Requirements To Meet Transitional Demand
- 48. Verizon has developed a model to estimate the additional work force requirements that would result from the elimination of unbundled switching, the Force-Load Model ("FLM"). An electronic copy of the FLM is being filed with my testimony, and FLM documentation is provided in Exhibit 6. The model can be run on a personal computer using any recent version of Microsoft Excel.
- 49. Dr. Taylor provided estimates of incremental hot cuts during the 12-month transition period for use as inputs to the FLM. These estimates are based on three scenarios that reflect conversions of 35 percent, 65 percent and 100 percent of the embedded base of UNE-P lines. Dr. Taylor provided these estimates for the nine Verizon states that account for about 88 percent of Verizon's UNE-P lines. The additional workforce requirements calculated by the FLM for these two scenarios are displayed on Exhibit 7. Dr. Taylor then used these results to estimate the additional workforce

requirements for Verizon's remaining 17 states, which account for about 12 percent of Verizon's UNE-P lines. The additional workforce requirements for these 17 states are also displayed on Exhibit 7.

- 50. For each scenario, the incremental hot cut demand has two components: the incremental demand resulting from the normal movement of customers between carriers, and the incremental demand resulting from the conversion of the embedded base of UNE-P lines. Because the embedded base conversion is assumed to be completed within a 12-month period, the analysis necessarily reflects a changing incremental work load over time. It should be emphasized that the FLM calculates incremental (*i.e.*, additional) work force requirements resulting from the elimination of unbundled switching and UNE-P, not total work force levels.
- 51. In order to calculate incremental work force levels, the FLM first converts the incremental hot cuts and winbacks to incremental minutes of frame technician work, based on factors reflecting the minutes required to cut over or install each line. These factors are derived from Verizon's Work Force Administration system. For loops with IDLC technology, the FLM reflects the additional level of incremental work required before such loops can be cut over.
- 52. The FLM then converts the incremental work times into incremental staffing levels. Incremental work times are converted into incremental staffing levels through division by a factor representing a standard number of minutes per month for a central office technician. The incremental staffing levels are adjusted by a standardized factor reflecting an allocation of time to sick time, vacations, and training. Incremental

supervision requirements are then calculated by applying an associate/manager ratio to the incremental number of central office technicians.

- 53. The FLM makes similar calculations for incremental staffing levels in the administrative work centers that support hot cuts, such as the Verizon personnel processing hot cut orders and communicating with competing carriers about the status of their dial tone and the completion of the cutover. The FLM also makes adjustments to reflect the fact that the incremental work load in Verizon's order processing centers is driven by the number of non-flow-through orders, rather than the number of hot cut lines. In addition, the FLM adjusts for winbacks, which do not require any communication with the competing carrier.
- 54. The incremental staffing levels needed in each state served by Verizon under the three scenarios are displayed in Exhibit 7. Since the incremental staffing levels are created by the elimination of unbundled switching and UNE-P, at least some of the incremental staffing requirements could be met with the large number of workers that are currently handling UNE-P-related tasks in central offices and support centers. The remaining incremental work force requirements could easily be handled by hiring and training additional new employees.
  - B. Hiring and Training Additional Workers for Hot Cuts
- 55. Verizon could obtain additional hot cut employees by first offering these positions to current employees, consistent with Verizon's current collective bargaining agreement. Any positions not filled with current employees would be filled through new hires under Verizon's standardized hiring processes.

- 56. Generally, there are no educational requirements for new hires to associate positions, such as frame technicians, although a high school or equivalent diploma is preferred. Applicants are required to pass a battery of tests that measure situational judgment and basic cognitive skills. A physical examination and a drug screening are also required and, for field technician jobs, there are requirements for working aloft.
- 57. Verizon can easily hire the number of people required in a relatively short period of time. In fact, the New York PSC concluded that "Verizon will be able to hire and train the necessary additional workers, even if the number is greater than what Verizon predicts it will need." NY Order at 63.
- 58. Verizon will be able to hire enough people to meet significant increases in demand for hot cuts. Because of force reductions in the telecommunications industry over the last several years, there is a large pool of experienced workers available to fill incremental staffing needs. Indeed, because the qualifications for these positions are relatively modest, Verizon would not be limited to hiring experienced telecommunications workers. Dr. Taylor's analysis of current unemployment statistics for the states where Verizon provides service shows that qualified job seekers are available in numbers far exceeding those that would be required by Verizon.
- 59. Under the 12-month transition period during which UNE-P lines would be hot cut to competing providers' switches, Verizon would likely hire temporary workers or experienced contractors to satisfy much of the incremental staffing requirements.

  Those workers can be terminated or converted to full-time employees at the end of the migration period.

- 60. The training requirements for new hires would vary depending on job title. For the central office environment, both Central Office Technicians and Frame Specialist titles are utilized for employees that perform hot cuts. Formal training for these employees includes a hands-on basic frame course, hot cut certification training, and courses designed to utilize OSS for managing work and on-the-job training. The work centers employ a formal instructor-led course, a computer-based training ("CBT") course, and on-the-job training. Here again, the training is focused on the specific tasks associated with the job requirements, such as use of OSS, line translations, database, customer contact skills and order entry.
- 61. A trained workforce could be put in place relatively quickly. In accordance with Verizon's standard training requirements, new central office technicians would be required to attend approximately 20 hours of training, which could be provided within a single week. Service representatives would require approximately 112 hours of training, delivered over three weeks. Since the increase demand will not likely occur all at once, Verizon will have time to hire and train the necessary staff on a rolling basis.
- 62. Verizon will have sufficient work space, equipment and tools available for the new employees. Verizon's force levels have been reduced recently, which has made available spare office space, computers, and tools for new employees. Making work space, equipment and tools available, to the extent necessary, should not impose any insurmountable obstacles. Verizon has frequently had to provide work space, equipment and tools for additional staff on a rapid basis (e.g., in connection with the establishment of new work centers).

- 63. The additional work force needed for hot cut wiring will not produce crowding at the frame. The additional work force needed even under the conservative scenario would merely bring the level of frame activity closer to staffing levels prevailing in earlier years, at which crowding was not a problem. In Verizon's 20 central offices with the greatest number of UNE-P lines in service, the largest number of additional central office technicians required during any month during the 12-month transition period would range from [BEGIN PROPRIETARY] [END PROPRIETARY]. Given the size of these central offices, such numbers of additional technicians would not overcrowd the frame. Moreover, Verizon is willing to perform hot cuts 24 hours a day, seven days a week to spread the work out over several different shifts.
- 64. Verizon's OSS are capable of handling the additional ordering activity that would be associated with the elimination of UNE-P. Verizon has already modified its OSS to provide for flowthrough of hot cut orders from existing UNE-P arrangements. Indeed, Verizon would not expect overall ordering levels to increase because UNE-P orders would be eliminated and would not be fully replaced by unbundled loop orders. In any event, Verizon's OSS are robust and are scalable to support significant increases in transaction volumes.
- 65. Moreover, Verizon follows a comprehensive capacity management process to ensure that its systems have sufficient capacity to handle current and projected volumes. Capacity management is an ongoing process. Verizon collects key system performance data such as CPU utilization, memory utilization, and transaction volumes. Verizon analyzes the performance data and identifies any servers that are exceeding pre-

defined utilization thresholds. Verizon also extrapolates from existing performance data to anticipate future utilization based on predicted transaction workload. Based on the utilization data and the predicted future needs, Verizon develops specific action plans for additional system tuning, application architecture changes, and infrastructure upgrades for hardware and system software components.

66. Verizon also expects that the NPAC will be able to handle the additional demand for number porting that would be associated with a shift from UNE-P to unbundled loops. The current number portability administrator, NeuStar, advised the FCC that the NPAC database has the capability to handle in excess of 25 telephone number ports per second, a level of performance that should be ample to support any conceivable increase in hot cut demand.<sup>4</sup> Note that 25 ports per second amounts to approximately 65 million ports per month. However, NeuStar's web site indicates sufficient overall NPAC capacity for "tens of millions" of transactions per day, corresponding to hundreds of millions of transactions per month. (See www.neustar.biz/addressing/npac.cfm.) Our estimated volume of incremental hot cuts for the states served by Verizon is less than [BEGIN PROPRIETARY] [END PROPRIETARY] per month in the most conservative scenario that assumes conversion of the entire embedded base of UNE-P lines. See Exhibit 1 to Dr. Taylor's declaration regarding hot cuts. Thus, the additional demand on the NPAC database would amount to a fraction of one percent.

<sup>&</sup>lt;sup>4</sup> See Letter from Joseph F. Franlin, Senior Vice President, Operations, Neustar, to Mr. Tom Sugrue, Chief, Wireless Telecommunications Bureau, FCC, WT Docket No. 01-184 (April 2, 2002).

# VI. Conclusion

of. Verizon has hot cut processes that are more than capable of handling the volumes that might result from the elimination of unbundled switching and UNE-P arrangements. The New York PSC has thoroughly reviewed Verizon's hot cut processes, including Verizon's batch hot cut process, and concluded that these processes are fully scalable and capable of handling the volumes of hot cuts that would result from the elimination of UNE-P.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on October 1, 2004

Thomas Maguire

